FIG. 1

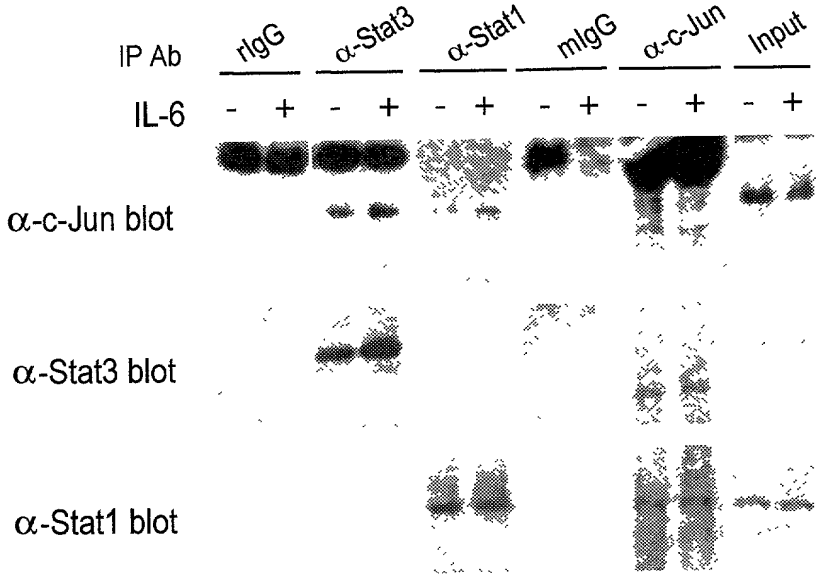

IP Ab
rIgG
α-Stat3
α-Stat1
mIgG
α-c-Jun
Input
IL-6
- + - + - + - + - + - +
α-c-Jun blot
α-Stat3 blot
α-Stat1 blot

FIG. 2A

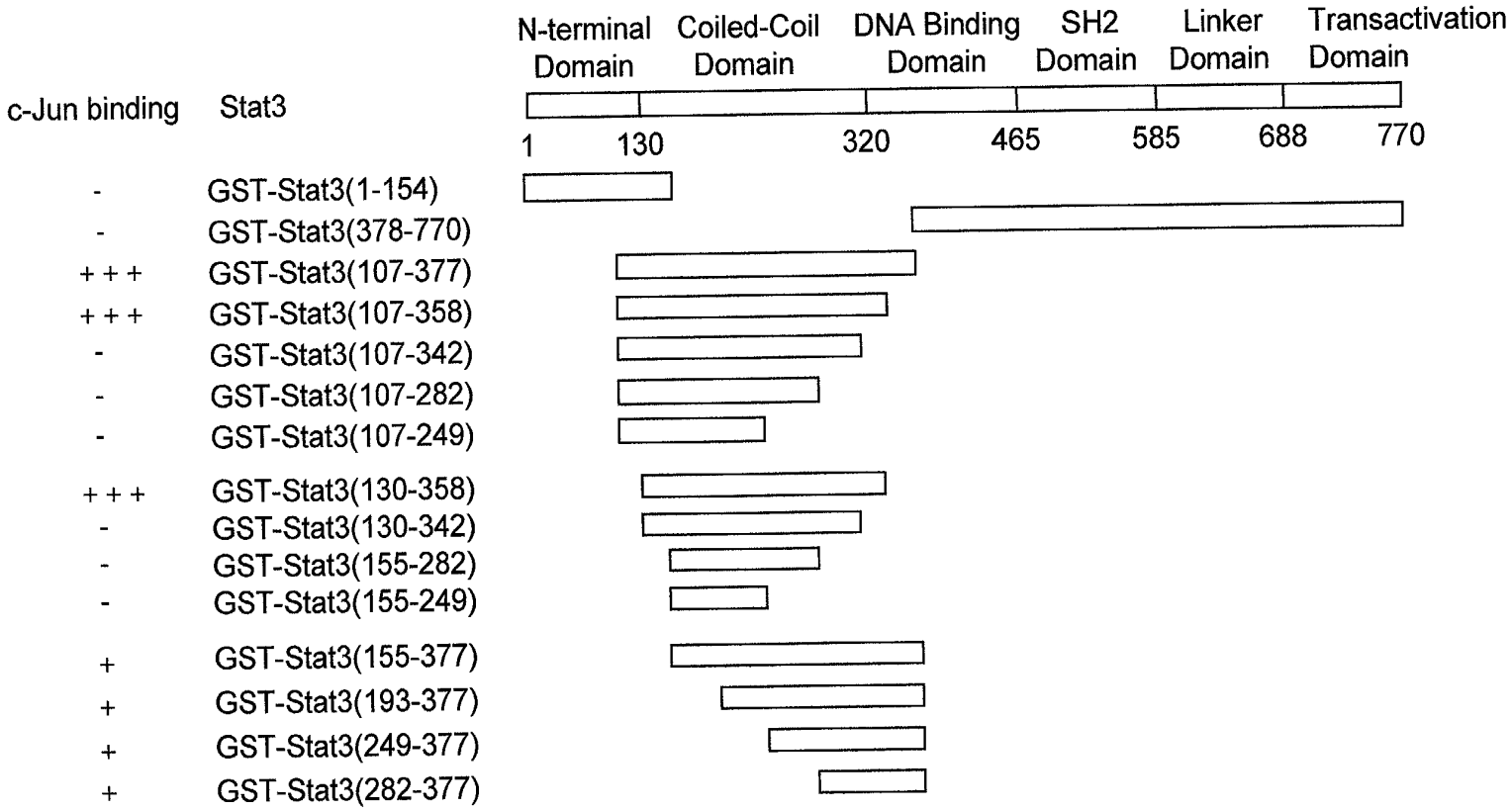

c-Jun binding
Stat3
N-terminal Domain
Coiled-Coil Domain
DNA Binding Domain
SH2 Domain
Linker Domain
Transactivation Domain
1
130
320
465
585
688
770
-
GST-Stat3(1-154)
-
GST-Stat3(378-770)
+ + +
GST-Stat3(107-377)
+ + +
GST-Stat3(107-358)
-
GST-Stat3(107-342)
-
GST-Stat3(107-282)
-
GST-Stat3(107-249)
+ + +
GST-Stat3(130-358)
-
GST-Stat3(130-342)
-
GST-Stat3(155-282)
-
GST-Stat3(155-249)
+
GST-Stat3(155-377)
+
GST-Stat3(193-377)
+
GST-Stat3(249-377)
+
GST-Stat3(282-377)

FIG. 2B

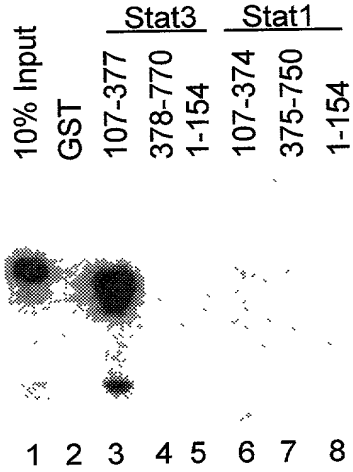


FIG. 2C

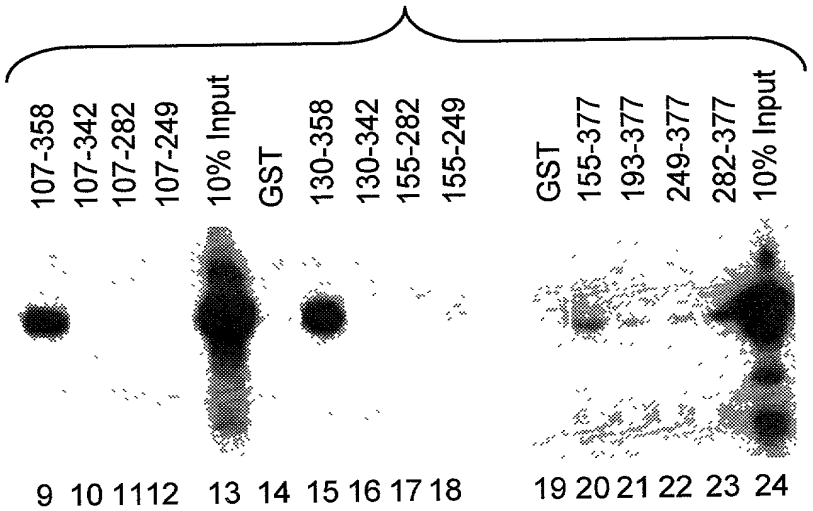


FIG. 2D

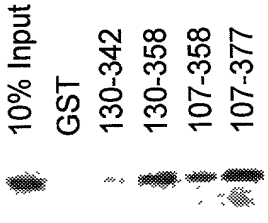


FIG. 3A

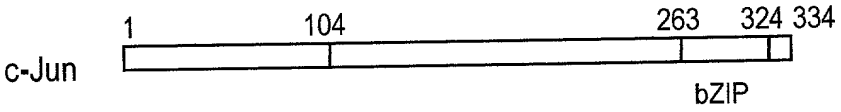

1
104
263
324
334
c-Jun
bZIP

FIG. 3B

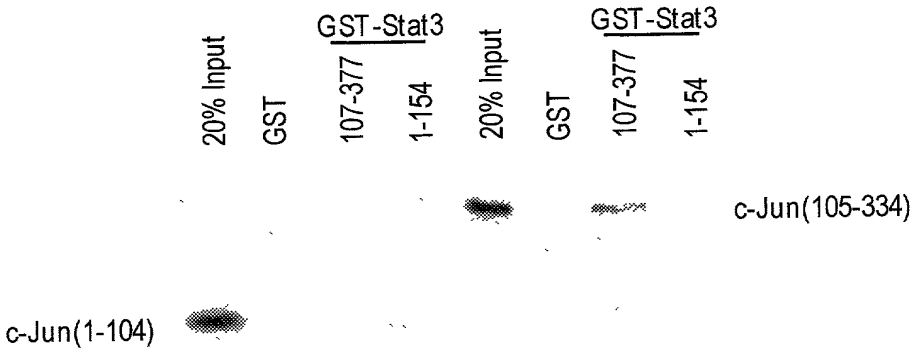

20% Input
GST
GST-Stat3
107-377
1-154
20% Input
GST
GST-Stat3
107-377
1-154
c-Jun(105-334)
c-Jun(1-104)

FIG. 4A

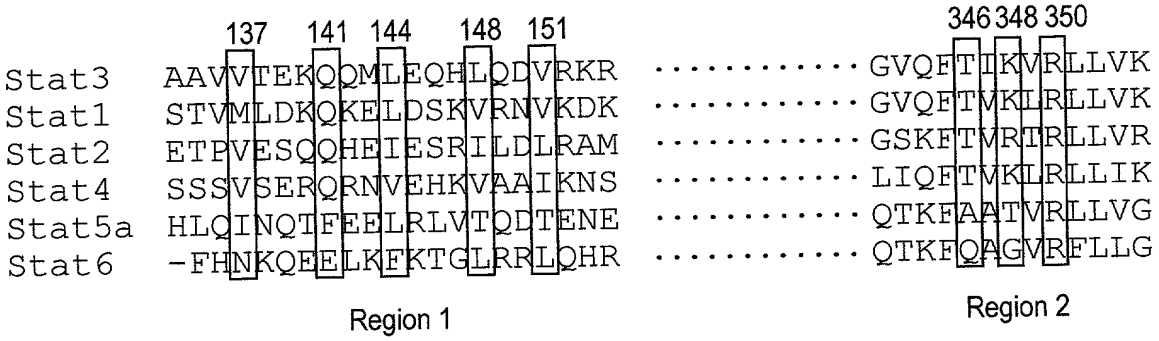

137 141 144 148 151
346 348 350
Stat3 AAVVTEKQQMLEQHLQDVRKR ..... GVQFTIKVRLLVK
Stat1 STVMLDKQKELDSKVRNVKDK ..... GVQFTMKLRLLVK
Stat2 ETPVESQQHEIESRILDLRAM ..... GSKFTMRTRLLVR
Stat4 SSSVSERQRNVEHKVAAIKNS ..... LIQFTVKLRLLIK
Stat5a HLQINQTFEELRLVTQDTENE ..... QTKFAATVRLLVG
Stat6 -FHNKQEELKFKTGLRRLQHR ..... QTKFQAGVRFLLG
Region 1
Region 2

FIG. 4B

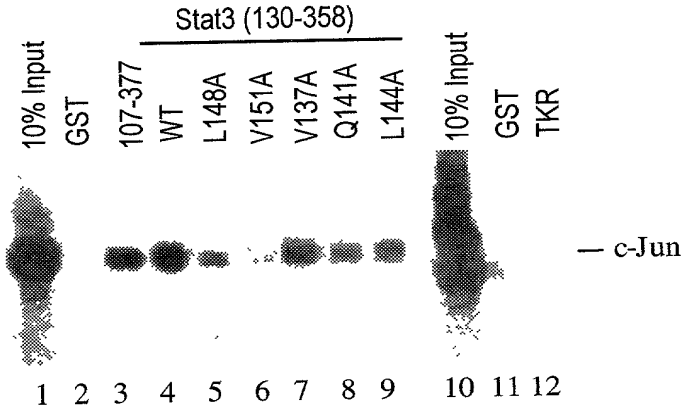

Stat3 (130-358)
10% Input
GST
107-377
WT
L148A
V151A
V137A
Q141A
L144A
10% Input
GST
TKR
— c-Jun
1 2 3 4 5 6 7 8 9 10 11 12

FIG. 5A

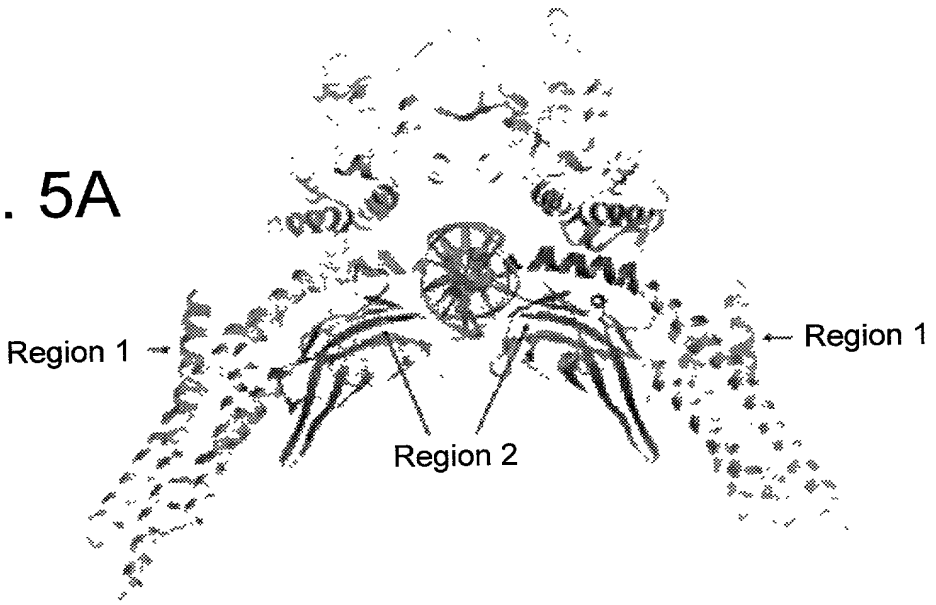
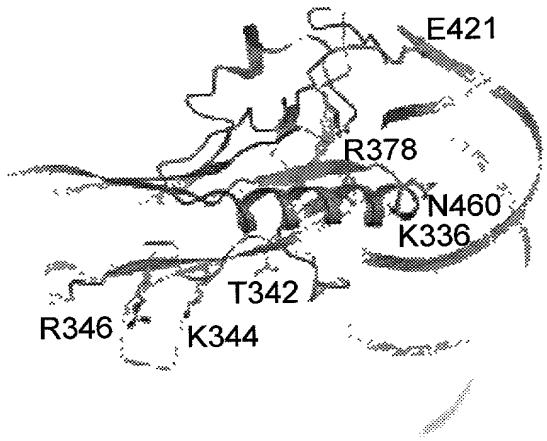


FIG. 5B

FIG. 5C



20040205.05.20040205

FIG. 6A

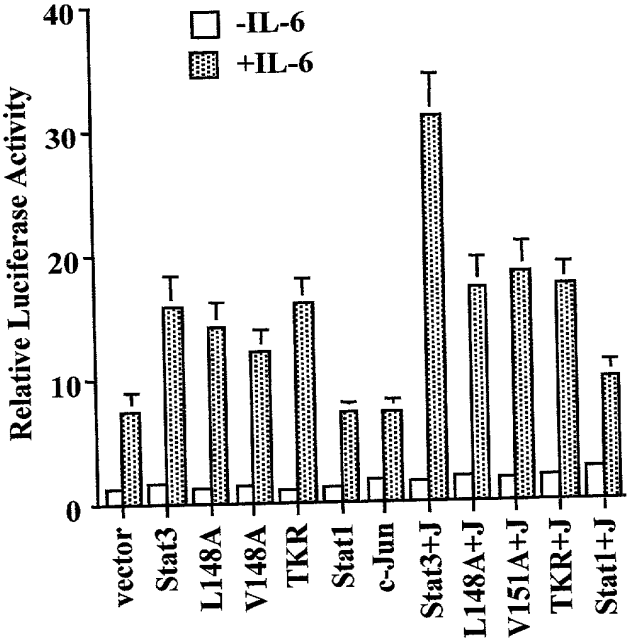

-IL-6
+IL-6
Relative Luciferase Activity
40
30
20
10
0
vector
Stat3
L148A
V148A
TKR
Stat1
c-Jun
Stat3+J
L148A+J
V151A+J
TKR+J
Stat1+J

FIG. 6B

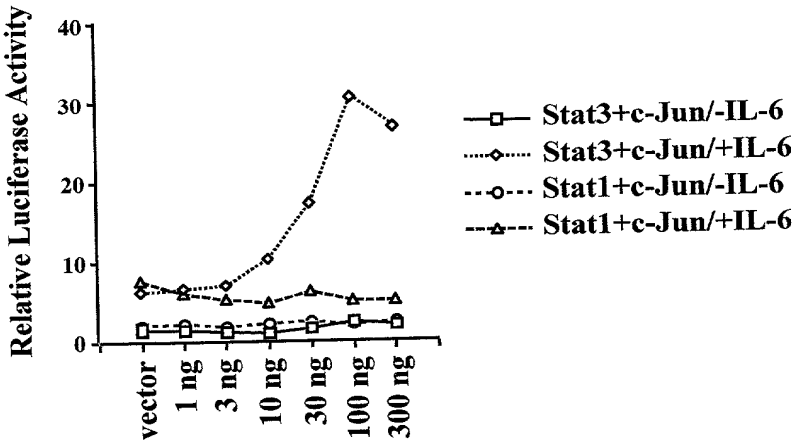

Relative Luciferase Activity
40
30
20
10
0
vector
1 ng
3 ng
10 ng
30 ng
100 ng
300 ng
Stat3+c-Jun/-IL-6
Stat3+c-Jun/+IL-6
Stat1+c-Jun/-IL-6
Stat1+c-Jun/+IL-6

FIG. 6C

-
IL-6
IFN-γ
-SIF A
-SIF B
-SIF C

FIG. 6D

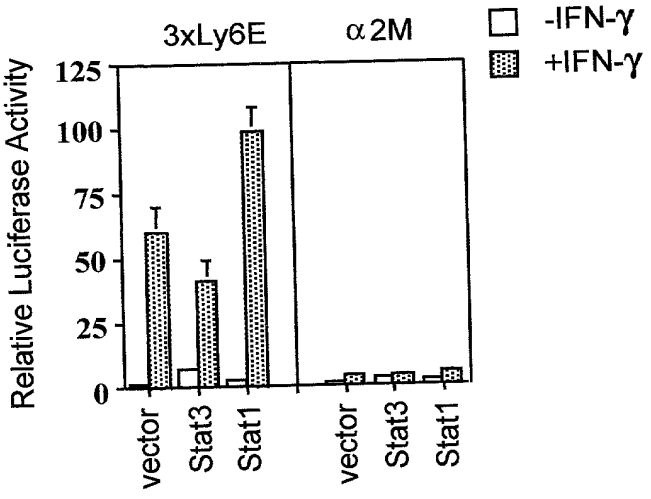

3xLy6E
α2M
-IFN-γ
+IFN-γ
Relative Luciferase Activity
125
100
75
50
25
0
vector
Stat3
Stat1
vector
Stat3
Stat1

FIG. 7A

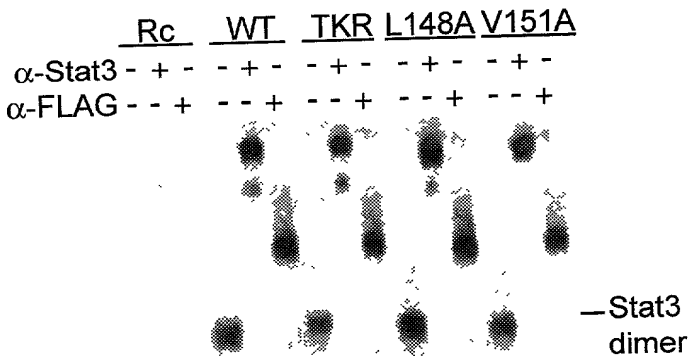


FIG. 7B

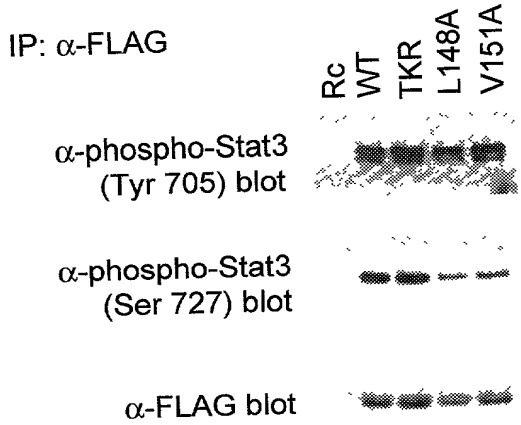
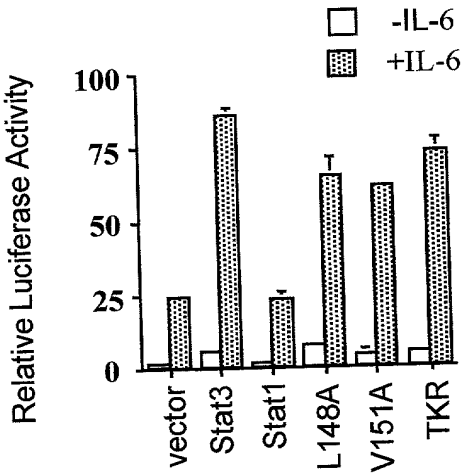



FIG. 7C